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A Study of Financial Reporting Principles through Analysis of Case Studies

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A Study of Financial Reporting Principles through Analysis of Case Studies

By

Thomas Anthony Steis

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford

May 2019

Approved by

Advisor: Dr. Victoria Dickinson

Reader: Dr. W. Mark Wilder

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ABSTRACT

THOMAS ANTHONY STEIS: A Study of Financial Reporting Principles through
Analysis of Case Studies
(Under the Direction of Victoria Dickinson)

The following thesis provides solutions to case studies on various financial accounting standards in agreement with Generally Accepted Accounting Principles as set forth by the Financial Accounting Standards Board. In conjunction with the topics learned in Intermediate Financial Accounting, each case focuses on a separate area of financial reporting through application within specific companies. The thesis displays understanding of accounting principles, financial statement preparation and analysis, and current accountancy topics. The case studies were completed under the direction of Dr. Victoria Dickinson in fulfillment of the requirements for the University of Mississippi, Sally McDonnell Barksdale Honors College, and Patterson School of Accountancy ACCY 420 course in the 2017-2018 academic year.

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Case 1: Home Heaters, Inc.

Financial Analysis and Comparison of Eads Heaters, Inc.
and Glenwood Heating, Inc.

Prepared By: Tommy Steis

September 6, 2017

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I. Case Introduction

There are multiple ways to account for the same transaction under GAAP. This example of using two companies in similar markets with the same transactions illustrates how different methods affect an investor's decision to allocate funds. The test lies in the application of various principles, creation of a company's financial statements, and the analysis of each company. I learned how to apply objectives learned in lower level accounting classes, and the implication of such applications.

II. Executive Summary

Enclosed in this document are statements from two companies, in the same industry and in similar markets. Appendices A and B contain the trial balances and transactions from two separate periods. Each company accounted for transactions in a different manner, resulting in differences on their end of the year financial statements.

Although each company had the same transactions, the better investment is Glenwood Heating, Inc. Their profitability and accounting methods favor investors over those of Eads Heaters, Inc.

III. Glenwood Heating, Inc. Financial Statements

The following figures include financial statements derived from transactional information provided in the case and detailed in Appendix 1 to this case.

Glenwood Heating, Inc.		
Income Statement		
For the Year Ended December 31, 20X1		
Sales		\$ 398,500.00
Cost of Goods Sold		<u>177,000.00</u>
Gross Profit		221,500.00
Expenses		
Rent Expense	\$ 16,000.00	
Interest Expense	27,650.00	
Bad Debt Expense	994.00	
Depreciation Expense- Building	10,000.00	
Depreciation Expense- Equipment	9,000.00	
Other Operating Expenses	<u>34,200.00</u>	
Total Expenses		<u>97,844.00</u>
Earnings Before Taxes		123,656.00
Income Tax		<u>30,914.00</u>
Net Income		<u><u>\$ 92,742.00</u></u>

Glenwood Heating, Inc.	
Statement of Retained Earnings	
For the Year Ended December 31, 20X1	
Retained Earnings, January 1	\$ -
Add: Net Income	<u>92,742.00</u>
	92,742.00
Less: Dividends	<u>23,200.00</u>
Retained Earnings, December 31	<u><u>\$ 69,542.00</u></u>

Glenwood Heating, Inc.
Balance Sheet
December 31, 20X1

Assets Current Assets Cash \$ 426.00 Accounts Receivable \$ 99,400.00 Less: Allowance 994.00 Inventory 62,800.00 Total Current Assets 161,632.00 Property, Plant, and Equipment Land 70,000.00 Building 350,000.00 Less: Accumulated Depreciation - Building 10,000.00 Equipment 80,000.00 Less: Accumulated Depreciation - Equipment 9,000.00 Total Property, Plant, and Equipment 481,000.00 Total Assets \$ 642,632.00	Current Liabilities Notes Payable \$ 380,000.00 Accounts Payable 26,440.00 Interest Payable 6,650.00 Total Current Liabilities 413,090.00 Total Liabilities 413,090.00 Stockholders' Equity Common Stock 160,000.00 Retained Earnings 69,542.00 Total Stockholders' Equity 229,542.00 Total Liabilities and Equity \$ 642,632.00
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IV. Eads Heaters, Inc. Financial Statements

The following figures include financial statements derived from transactional information provided in the case and detailed in Appendix 2 to this case.

Eads Heaters Inc.		
Income Statement		
For the Year Ended December 31, 20X1		
Sales		\$ 398,500.00
Cost of Goods Sold		188,800.00
Gross Profit		<u>209,700.00</u>
Expenses		
Interest Expense	35,010.00	
Bad Debt Expense	4,970.00	
Depreciation Expense- Building	10,000.00	
Depreciation Expense- Equipment	20,000.00	
Depreciation Expense - Leased Equipment	11,500.00	
Other Operating Expenses	<u>34,200.00</u>	
Total Expenses		<u>115,680.00</u>
Earnings Before Taxes		94,020.00
Income Tax		<u>23,505.00</u>
Net Income		<u><u>\$ 70,515.00</u></u>

Eads Heaters Inc.	
Statement of Retained Earnings	
For the Year Ended December 31, 20X1	
Retained Earnings, January 1	\$ -
Add: Net Income	70,515.00
	<u>70,515.00</u>
Less: Dividends	23,200.00
Retained Earnings, December 31	<u><u>\$ 47,315.00</u></u>

V. Analysis

Eads Heaters, Inc. used accounting methods different than those implemented by Glenwood Heating, Inc. In doing so, Eads maintained a healthy level of cash, turned inventory over quicker, capitalized rental equipment, and gave conservative estimates for depreciation and allowance for bad debts. However, their accounting methods negatively impacted net income and retained earnings.

Using the information in the financial statements, a few ratios need to be focused on.

Ratio Analysis - A Comparison		
	Glenwood	Eads
Earnings Per Share	\$ 28.98	\$ 22.04
Return on Assets	14.432%	10.020%
Return on Equity	57.964%	44.072%
Inventory Turnover	6.35	7.81

These ratios show Glenwood is the more profitable company, although they did not manage their assets as well as Eads. From a profitability standpoint, an investment in Glenwood is a good investment.

Glenwood's asset management may pose a problem for some investors. However, examination of their transactions show that they were conservative in their estimation of Income Tax, pulling directly from the cash account. Although they are low in cash, they most likely over-estimated, meaning their cash flow will not be as bad as it seems. Glenwood also has over \$90,000 they are waiting to collect in Accounts Receivable. Also,

their inventory turnover is lower than Eads because of the inventory methods each company used. Glenwood's inventory method indicated they sold a lesser cash amount of inventory, although they sold the same physical count as Eads.

Although Eads' accounting methods provided some positive balances on their books, Glenwood's profitability and accounting decisions make it the better investment.

Appendix A – Glenwood Heating, Inc. Transactions

The following charts detail transactions throughout the year for Glenwood Heating, Inc.

Glenwood Heating, Inc.		
Trial Balance-Part A		
	Debits	Credits
Cash	\$ 47,340.00	\$ -
Accounts Receivable	99,400.00	
Inventory	239,800.00	
Land	70,000.00	
Building	350,000.00	
Equipment	80,000.00	
Accounts Payable		26,440.00
Note Payable		380,000.00
Interest Payable		6,650.00
Common Stock		160,000.00
Dividend	23,200.00	
Sales		398,500.00
Other Operating Expenses	34,200.00	
Interest Expense	27,650.00	
Total	<u><u>\$971,590.00</u></u>	<u><u>\$ 971,590.00</u></u>

Glenwood Heating, Inc.**Part A: Recording basic transactions**

		Assets						=	Liabilities			+	Equity	
		Cash	Accounts Receivable	Inventory	Land	Building	Equipment	Accounts Payable	Note Payable	Interest Payable	Common Stock	Retained Earnings		
1	\$ 160,000										\$160,000			
2	\$ 400,000								\$400,000	\$ 21,000		\$(21,000)		
3	\$(420,000)				\$70,000	\$350,000								
4	\$ (80,000)											\$ 80,000		
5				\$239,800				\$ 239,800						
6			\$ 398,500									\$398,500		
7	\$ 299,100	\$ (299,100)												
8	\$(213,360)							\$(213,360)						
9	\$ (41,000)								\$ (20,000)	\$(21,000)				
10	\$ (34,200)											\$(34,200)		
11	\$ (23,200)											\$(23,200)		
12										\$ 6,650		\$(6,650)		
Bal.	\$ 47,340	\$ 99,400	\$239,800	\$70,000	\$350,000	\$ 80,000	\$ 26,440	\$380,000	\$ 6,650		\$160,000	\$313,450		

Note: Any transaction that affects Net Income was directly closed out into Retained Earnings i.e. Interest Expense.

Additional transactions were recorded in Part B of the case. The following figures detail those transactions and the updated trial balance.

Glenwood Heating, Inc.		
Part B: Trial Balance		
	Debits	Credits
Cash	\$ 426.00	\$ -
Accounts Receivable	99,400.00	
Allowance for Bad Debts		994.00
Inventory	62,800.00	
Land	70,000.00	
Building	350,000.00	
Accumulated Depreciation - Building		10,000.00
Equipment	80,000.00	
Accumulated Depreciation - Equipment		9,000.00
Accounts Payable		26,440.00
Note Payable		380,000.00
Interest Payable		6,650.00
Common Stock		160,000.00
Dividend	23,200.00	
Sales		398,500.00
Cost of Good Sold	177,000.00	
Other Operating Expenses	34,200.00	
Bad Debt Expense	994.00	
Depreciation Expense - Building	10,000.00	
Depreciation Expense - Equipment	9,000.00	
Rent Expense	16,000.00	
Interest Expense	27,650.00	
Provision for Income Tax	30,914.00	
Total	\$ 991,584.00	\$ 991,584.00

Glenwood Heating, Inc.

Part B: Recording Additional Information

Transaction	Assets									=	Liabilities			+	Equity	
	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation Building	Equipment	Accumulated Depreciation Equipment	Accounts Payable	Interest Payable	Note Payable	Common Stock	Retained Earnings		
Balances: Part A	\$ 47,340	\$ 99,400	\$ -	\$ 239,800	\$ 70,000	\$ 350,000	\$ -	\$ 80,000	\$ -	\$ 26,440	\$ 6,650	\$ 380,000	\$ 160,000	\$ 313,450		
(B1) Bad Debts			\$ 994											\$ (994)		
(B2) CGS				\$ (177,000)										\$ (177,000)		
(B3) Depreciation Building							\$ 10,000							\$ (10,000)		
Equipment									\$ 9,000					\$ (9,000)		
(B4) Equipment Rental Payment	\$ (16,000)													\$ (16,000)		
(B5) Income Tax	\$ (30,914)													\$ (30,914)		
Balances	\$ 426	\$ 99,400	\$ 994	\$ 62,800	\$ 70,000	\$ 350,000	\$ 10,000	\$ 80,000	\$ 9,000	\$ 26,440	\$ 6,650	\$ 380,000	\$ 160,000	\$ 69,542		

Appendix B - Eads Heaters, Inc. Transactions

The following charts detail transactions throughout the year for Eads Heaters, Inc.

Eads Heaters, Inc.		
Trial Balance-Part A		
	Debits	Credits
Cash	\$ 47,340.00	\$ -
Accounts Receivable	99,400.00	
Inventory	239,800.00	
Land	70,000.00	
Building	350,000.00	
Equipment	80,000.00	
Accounts Payable		26,440.00
Note Payable		380,000.00
Interest Payable		6,650.00
Common Stock		160,000.00
Dividend	23,200.00	
Sales		398,500.00
Other Operating Expenses	34,200.00	
Interest Expense	27,650.00	
Total	<u>\$971,590.00</u>	<u>\$971,590.00</u>

Eads Heaters, Inc.

Part A: Recording basic transactions

		Assets						=	Liabilities			+	Equity	
		Accounts						Accounts	Note	Interest		Common	Retained	
		Cash	Receivable	Inventory	Land	Building	Equipment	Payable	Payable	Payable		Stock	Earnings	
1	\$ 160,000											\$160,000		
2	\$ 400,000								\$400,000	\$ 21,000			\$ (21,000)	
3	\$(420,000)				\$70,000	\$350,000								
4	\$ (80,000)						\$ 80,000							
5				\$239,800				\$ 239,800						
6			\$ 398,500										\$398,500	
7	\$ 299,100	\$ (299,100)												
8	\$(213,360)							\$(213,360)						
9	\$ (41,000)								\$ (20,000)	\$(21,000)				
10	\$ (34,200)												\$ (34,200)	
11	\$ (23,200)												\$ (23,200)	
12										\$ 6,650			\$ (6,650)	
Bal.	\$ 47,340	\$ 99,400	\$239,800	\$70,000	\$350,000	\$ 80,000		\$ 26,440	\$380,000	\$ 6,650		\$160,000	\$313,450	

Note: Any transaction that affects Net Income was directly closed out into Retained Earnings i.e. Interest Expense.

Additional transactions were recorded in Part B of the case. The following figures detail those transactions and the updated trial balance.

Eads Heaters, Inc.		
Part B: Trial Balance		
	Debits	Credits
Cash	\$ 7,835.00	\$ -
Accounts Receivable	99,400.00	
Allowance for Bad Debts		4,970.00
Inventory	51,000.00	
Land	70,000.00	
Building	350,000.00	
Accumulated Depreciation - Building		10,000.00
Equipment	80,000.00	
Accumulated Depreciation - Equipment		20,000.00
Leased Equipment	92,000.00	
Accumulated Depreciation - Leased Equipment		11,500.00
Accounts Payable		26,440.00
Note Payable		380,000.00
Interest Payable		6,650.00
Lease Payable		83,360.00
Common Stock		160,000.00
Dividend	23,200.00	
Sales		398,500.00
Cost of Good Sold	188,800.00	
Other Operating Expenses	34,200.00	
Bad Debt Expense	4,970.00	
Depreciation Expense - Building	10,000.00	
Depreciation Expense - Equipment	20,000.00	
Depreciation Expense - Leased Equipment	11,500.00	
Interest Expense	35,010.00	
Provision for Income Tax	23,505.00	
Total	<u>\$ 1,101,420.00</u>	<u>\$ 1,101,420.00</u>

Eads Heaters, Inc.

Part B: Recording Additional Information

Transaction	Assets										
	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation Building	Equipment	Accumulated Depreciation Equipment	Leased Equipment	Accumulated Depreciation Leased Equip.
Balances: Part A	\$ 47,340	\$ 99,400	\$ -	\$ 239,800	\$ 70,000	\$ 350,000	\$ -	\$ 80,000	\$ -	\$ -	\$ -
(B1) Bad Debts			\$ 4,970								
(B2) CGS				\$ (188,800)							
(B3) Depreciation Building							\$ 10,000		\$ 20,000		
(B3) Depreciation Equipment											
(B4) Equipment Rental Payment	\$ (16,000)									\$ 92,000	\$ 11,500
(B5) Income Tax	\$ (23,505)										
Balances	\$ 7,835	\$ 99,400	\$ 4,970	\$ 51,000	\$ 70,000	\$ 350,000	\$ 10,000	\$ 80,000	\$ 20,000	\$ 92,000	\$ 11,500

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	Liabilities				Stockholders' Equity	
	Accounts Payable	Interest Payable	Note Payable	Lease Payable	Common Stock	Retained Earnings
Balances: Part A	\$ 26,440.00	\$ 6,650.00	\$ 380,000.00	\$ -	\$ 160,000.00	\$ 313,450.00
(B1) Bad Debts						(4,970.00)
(B2) CGS						(188,800.00)
(B3) Depreciation Building						(10,000.00)
(B3) Depreciation Equipment						(20,000.00)
(B4) Equipment Rental Payment				92,000.00		(11,500.00)
(B5) Income Tax				(8,640.00)		(7,360.00)
Balances	\$ 26,440.00	\$ 6,650.00	\$ 380,000.00	\$ 83,360.00	\$ 160,000.00	\$ 47,315.00

Case 2: Molson Coors Brewing Company

Income Statement Analysis

Prepared By: Tommy Steis

September 20, 2017

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I. Case Introduction

The Income Statement's purpose is to allow users to analyze a company's past performance, predict future performance, assess risk, and predict the amounts, timing, and uncertainty of future cash flows. In this case, I was asked to define and examine Molson Coors Brewing Company's Income Statement. The following information improved my understanding of the Income Statement and its presentation within Molson Coors' financial reporting package.

II. The Major Classifications on an Income Statement

There are six main sections to an Income Statement. They are Operating, Nonoperating, Income Tax, Discontinued Operations, Noncontrolling Interest, and Earnings Per Share.

Operating Section- Includes revenues and expenses of a company's core operations. The operating subsections include Revenue or Sales, Cost of Goods Sold, Selling Expenses, and General and Administrative Expenses.

Nonoperating Section- Includes revenues and expenses of a company's peripheral operations. Peripheral transactions are infrequent or unusual and can also arise from the noncentral operations of a company.

Income Tax- Includes the expense based on the company's tax burden as calculated in the notes.

Discontinued Operations- Gains or losses realized by the disposal of a business unit.

Noncontrolling Interest- In cases where a company co-owns a subsidiary, the company must report the amount of income generated by that subsidiary that the company does not hold.

Earnings Per Share- Based on the company's Net Income and Shares outstanding, the Earnings Per Share measures a company's performance.

These sections are required of companies as to fully disclose their Net Income over the period. The Molson Coors Brewing Company consolidated their income statement, where they net, or add, each subsection. They may do so if each required section is mentioned.

III. GAAP Classified Income Statement Requirements

GAAP requires companies to report Classified Income Statements based on the Full Disclosure Principle. To restrict misleading and fraudulent information, the classifications, stated above, must be identified in the Income Statement. Classified Income Statements provide necessary decision-useful information to financial statement users. Users particularly observe granular information on a variety of company operations. In other words, the operating section shows users the company's central method of generating revenue, their efficiency in conducting business, and potential areas of improvement. In addition, the nonoperating section provides information on the costs of supporting functions within the organization. Perhaps the most decision-useful classification, the Earnings Per Share measures the company's overall performance while also indicating the company's value.

IV. Persistent Income

Typical users of Financial Statements include current and potential investors, whose goal is to receive a return on their investment. Persistent Income exemplifies the strength and consistency of the company's earnings over time. There is value to investors in persistent income.

V. Comprehensive Income vs. Net Income

Net income includes the material items on the income statement. Comprehensive Income is net income plus any gain or loss that occurs from the use of Fair Market Valuation on such items as available for sale securities or foreign currency conversion.

VI. Sales vs. Net Sales

Molson Coors uses Excise Tax as the difference between Net Sales and Sales. Typically, the difference in Sales and Net Sales are contra asset accounts such as sales discounts and sales returns and allowance. The client includes Excise Tax here because it is applied to the sales dollar amount. Basically, for each dollar of sales on beer, a percentage of Excise Tax is levied.

VII. Special Items on the Income Statement

In general, as Molson Coors states in their notes to the financial statements, they include any item they feel is not indicative of their core operations and do not reflect their actual processes. Special Items contain any gain or loss from peripheral activities, restructuring of their operations, or disposal on investments. For example, the company sells

equipment used in their production process. The equipment has depreciated to a book value of \$30,000. However, they sell the equipment for \$25,000. Because selling equipment is not Molson Coors' central purpose, they classify this loss as a special item, as it is a loss from peripheral activities.

Molson Coors identifies these special items as a separate line item as to not detail each transaction, perhaps because they believe them to reflect poorly on the company, despite being peripheral transactions. They report special items under the operating section; however, they are unusual and infrequent, which should be reported under the nonoperating section.

VIII. Other Income (expense), net vs. Special items, net

The main distinction between Special Items and Other Items, Expenses are that Special Items do not only include infrequent or unusual transactions. Some special items are core business operations, such as employee-related costs. Other Items are truly nonoperating expenses incurred due to peripheral business practices, including Foreign Currency Translations and sale of nonoperating assets.

IX. Comprehensive Income and Net Income, a Comparison

Comprehensive Income, 2013: \$760.2 Million

Net Income, 2013: \$572.5 Million

The Comprehensive Income is nearly \$200 Million more than Net Income for 2013.

Items that are not included in Net Income account for this difference. For Molson Coors, those items are Foreign currency translation adjustments, unrealized gains, pension

adjustments, amortization of net prior service cost, and ownership in unconsolidated subsidiaries' other comprehensive income. Any item in Comprehensive Income affects Equity but is not an investment or distribution by/to owners.

X. Effective Tax Rate

Molson Coors' Effective Tax Rate is 12.83 percent, as calculated by taking the Income Tax Expense, \$84 Million, and dividing it by Pretax Income, \$654.5 Million, which is found on the Income Statement.

Case 3: Pearson plc
Accounts Receivable Analysis
Prepared By: Tommy Steis
October 4, 2017

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I. Case Introduction

Cash flows drive business, and without credit, particularly in the form of receivables and payables, companies would have a hard time surviving. Receivables not only allow customers to manage cash flows, but it also helps the producer do work for companies beside the ones who can pay cash when it is earned. As with any lending, there is risk involved with extending receivables to customers. However, this risk allows for more sales and more success.

Pearson plc, a company based in England, uses Trade Receivables to collect earned cash from its customers. The company also uses two contra accounts to offset Trade Receivables that they do not receive, whether that be because the sale is returned, or the customer never paid. By examining receivables through Pearson, I learned how a foreign company accounts for receivables, contra accounts affect receivables, and the accounting behind contra accounts and receivables.

II. Accounts Receivable Overview

Accounts Receivable is a current asset that is used to account for credit sales to customers. These receivables are thought to be collected within one year, making them current. Another name for Accounts Receivable is Trade Receivable, as the company trades receiving cash now for a promise to pay in the future.

III. Accounts Receivable vs. Notes Receivable

Accounts Receivable is an oral promise to pay in the short-term for goods or services.

Notes Receivable is a written promise to pay a stated amount at a certain point in time.

They, therefore, differ in the fact that Accounts Receivable is oral and short-term, and Notes Receivable is written and can be either short-term or long-term. In addition, Notes Receivable are often interest bearing, whereas Accounts Receivable are not.

IV. Contra Accounts for Accounts Receivable

A contra account has a balance opposite to that of the corresponding account. The purpose of a contra account is to account for both the gross amount, i.e. Accounts Receivable, and the amounts that affect it, Allowance for Doubtful Accounts. Pearson's contra accounts are Provisions for Bad and Doubtful Debts and Provision for Sales Returns and Allowances.

Credit sales estimated to be uncollectable are captured in the Provisions for Bad and Doubtful Debts Account. To estimate this balance, managers may look at a debtor's prior record for paying off debts, or the time outstanding on the receivables.

Sales returns estimated to occur over the period are captured in the Provisions for Sales Returns and Allowances Account. Managers use historical sales return data and past financial information to estimate sales returns for the upcoming period.

V. Estimating Uncollectible Accounts Receivable

The percentage-of-sales procedure estimates the Allowance for Doubtful Accounts by estimating a percentage of credit sales that will be uncollectible. The aging-of-accounts procedure identifies the days outstanding of each receivable and estimates the Allowance for Doubtful Accounts by analyzing the aged receivables. For the percentage-of-sales

approach, the manager needs historical data to make a sound estimate of the percentage of credit sales uncollectible. They also need the credit sales for the period.

To determine the Allowance using the aging-of-accounts procedure, the manager needs an Aged Receivables report and historical data to form an accurate estimate for each aging period. The aging-of-accounts procedure most likely results in the more accurate estimate because it analyzes the Aged Receivables at a point in time, which from year to year will vary. By basing the estimate off historical bad debts data and applying it to the aged receivables, your Allowance negates the variation that it would not otherwise absorb in credit sales.

VI. Accounts Receivable Risk

It is difficult to identify customers who will not pay their debt. As a company, you can request a credit application, but from there you do not gain an idea of their cash flows or asset management. With extending any credit, there is always risk that the debtor defaults on the debt. Management assumes this risk in extending credit to those for whom the company has already done work. The company has incurred costs for the work and are at risk for not receiving compensation. Ultimately, the company's operating profit is hurt by bad debts.

VII. Accounting for Allowances for Doubtful Accounts

Provision for Doubtful Accounts (in £'000)

		72,000
5,000		26,000
20,000		3,000
		76,000

£5,000,000 credit for Exchange differences is the result of Pearson doing business with a customer that does not use the British Pound. Income Statement Movements of £26,000,000 is the estimate of bad debts expense. The Utilized line item of a credit of £20,000,000 is the write-off of bad debts. The £3,000,000 credit of the acquisition of a company is the provision for doubtful accounts assumed from that company.

Bad Debts Expense	26,000,000	
Provision for Doubtful Accounts		26,000,000
Provision for Doubtful Accounts	20,000,000	
Trades Receivable		20,000,000

Bad Debts Expense is found in the Expense part of the Operating Section in the Income Statement.

VIII. Accounting for Allowances for Sales Returns

Provision for Sales Returns (in £'000)

	372,000
	425,000
443,000	354,000

Sales Returns and Allowances (I/S)	425,000,000
Provision for Sales Returns (B/S)	425,000,000
Provision for Sales Returns (B/S)	443,000,000
Trades Receivable (B/S)	443,000,000

Estimated sales returns appear as a deduction to the revenue account in the income statement, as sales returns and allowances is a contra-revenue account. For Pearson, sales returns and allowances are included in the calculation of sales on the consolidated income statement. This calculation would be included in the notes to the financial statements.

IX. Accounting for Gross Accounts Receivables

Gross Trade Receivables (in £'000)

<hr/>	
1,030,000	
5,624,000	
	20,000
	443,000
	5,202,000
<hr/>	
989,000	

The beginning balance at January 1, 2009 is reflected in the £1,030,000,000 balance on the first line of the T account. Since we assume that all sales were made on credit, we debit the Trade Receivable account for those sales, or £5,624,000,000. The £20,000,000 credit reflects the write off of bad debts. The amount of actual book returns is represented by the £443,000,000 credit to Trade Receivables. The preliminary balance of the debits and credits subtracted by the ending balance of £989,000,000 gives the amount of cash collected for credit sales of £5,202,000,000.

Case 4: Palfinger AG
Property, Plant, & Equipment
Prepared By: Tommy Steis
November 8, 2017

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I. Case Introduction

Property, Plant, and Equipment are essential to the business process. Without them, companies could not yield products or have a normal place of business. Understanding how to account for fixed assets is therefore important in comprehending how businesses function.

Palfinger AG, a company in Austria, specializes in manufacturing hydraulic machinery, and serves construction, transportation, agricultural, and other industries. The objectives for this case are to understand and apply information on PP&E and depreciation.

Applying capitalization of costs, gains and losses, specific accounting methods, i.e. government grants, and depreciation methods aids in examining the effects of normal transactions on the financial statements.

II. Palfinger's Property and Equipment

As a manufacturer of heavy machinery, Palfinger AG will have Property, Plant, and Equipment to build their product from raw materials. Their business requires factories, land, storage for finished goods and raw materials, office buildings, conveyer belts for an assembly line, welding equipment, large machinery to convert raw materials into materials available to assemble, vehicles, i.e. trucks, to navigate their factories, forklifts to move material, and other fixtures and fittings to work within their machinery. These PP&E are required to manufacture their hydraulic machinery.

III. Property, Plant, & Equipment on the Balance Sheet

The Property, Plant, and Equipment line item in the balance sheet represents the cost at which Palfinger acquired the asset less straight-line depreciation of the items listed in part (a). However, land is not depreciated because it has an eternal useful life. Those items listed as PP&E that are not available for use are not depreciated until they become available for use. In addition, repairs or upgrades of the Property, Plant, and Equipment are capitalized because they add future value to the equipment, and those costs are included in the PP&E line item on the balance sheet.

IV. Equipment in Notes

Palfinger discloses machinery for production purposes and other plant fixtures, fittings, and equipment used in production of their goods. Essentially, Palfinger's notes define equipment as machinery and accessories that are necessary to produce their hydraulic machinery.

V. Prepayments and Assets Under Construction

Prepayments and Assets Under Construction represent assets that Palfinger is building for use as Plant, Property, and Equipment. For example, Palfinger could be constructing their own building to house their factory, which would be considered a prepayment and assets under construction.

Depreciation is applied to assets that are being used for business practices. Because assets under construction are unable to be used in normal business, it cannot be depreciated. However, once use of the asset begins, depreciation will take effect.

The reclassification of €14,958 in the notes under prepayments and assets under construction represents the fixed assets that have been completed and moved into use as Property, Plant, and Equipment.

VI. Depreciation Method

Palfinger depreciates their assets on a straight-line basis over the expected life of said asset. To determine the expected life of an asset, Palfinger uses the anticipated economic benefit and the timeline for that benefit. Straight line depreciation is a reasonable technique to use because it evenly distributes the accumulated depreciation and depreciation expense throughout the useful life, which matches the expenses with the revenues for that period. However, no matter how much the machine is used in a year, it is depreciated the same amount each year. So, straight-line depreciation is easy to implement and matches expenses with revenues, but it is not the most realistic measurement. Management must consider the nature of its assets, the effects of each depreciation method, and the reality of the depreciation, and decide which to implement based on interrelated trade-offs.

VII. Improvements

Palfinger capitalizes renovations and value enhancing modifications by adding the value of the enhancement to the respective PP&E asset, while keeping the carrying value of the old asset on the books. Alternatively, Palfinger could substitute the value of the existing asset with the value of the enhancing asset. For example, if Palfinger replaced the

carpeting in their office building, they would write the old value of the carpet off the books and replace it with the value of the new carpet.

VIII. PP&E and Depreciation in the Notes

The purchase of new property, plant, and equipment in fiscal 2007 is in the PP&E section of the notes under the additions line item for 2007. Total purchases for 2007 are €61,444. €733 in Government Grants are deducted from the carrying value of the asset.

Government grants are any assistance (monetary, land, equipment, etc.) from the government that provides a benefit to the company. In Palfinger's case, the government granted €417 in Land and Buildings and €316 in Plant and Machinery. According to IAS 20, grants can be accounted for in two ways: as deferred income, or through deducting the grant from the carrying value of the asset. Palfinger accounts for government grants using the second option, which deducts the grant from the carrying value of the asset.

Depreciation expense can be found under the accumulated depreciation and impairment section of the notes. Total depreciation for fiscal 2007 is €12,557.

Net Book Value is the historical cost of the asset less the accumulated depreciation on that asset. €1,501 Net Book Value of disposed assets is found taking the €13,799 in PP&E Disposals less the €12,298 in Disposal Accumulated Depreciation, which are found in the 2007 notes to the financial statements.

IX. Gain or Loss on Disposal

$€1,655 - 1,501 = €154$ Gain on Sale of PP&E. The gain represents the difference between the Net Book Value and the Fair Value for the PP&E. The fair value of the equipment is

the price at which a purchaser would be willing to buy the equipment. The Net Book Value is the cost of the item less the accumulated depreciation. Because the value that Palfinger received on the sale is greater than the Net Value of the asset on Palfinger's books, they report a gain.

X. Depreciation Application

Palfinger's Depreciation (Useful Life=5 years, Salvage Value=€1,273)				
	Straight Line		Double Declining Balance	
Year	Depreciation Expense	Book Value	Depreciation Expense	Book Value
Beginning		€10,673		€10,673
12/31/2007	€1,880	8,793	€4,269	6,404
12/31/2008	1,880	6,913	2,562	3,842
12/31/2009	1,880	5,033	1,537	2,305
12/31/2010	1,880	3,153	922	1,383
12/31/2011	1,880	1,273	110	1,273
Ending	€9,400	€1,273	€9,400	€1,273

XI. Depreciation Method Gain/Loss on Disposal

If the company sold the PP&E on December 31, 2007 for €7,500, they would calculate the Loss on Sale of Equipment as $€8,793 - 7,500 = €1,293$, which is found by taking the Fair Value (Selling Price) less the Net Book Value. €1,880 in Depreciation Expense using the Straight-Line Depreciation approach was realized during Palfinger's ownership of the equipment, while the Loss on the Sale decreases Income by €1,293. Thus, the net effect on the income statement is a deduction of €3,173.

Similarly, using the Double Declining method, for the equipment sold on December 31, 2007, the Gain on Sale of Equipment would be found by taking the Fair Value (Selling Price) less the Net Book Value, or $€7,500 - 6,404 = €1,096$. $€4,269$ in Depreciation Expense was realized during Palfinger's two-year ownership of the equipment, while the Gain on the Sale increases income by $€1,096$. Thus, the net effect on the income statement is a deduction of $€3,173$.

Each depreciation method's income statement impact is the same, which shows that no matter which method you use, there is no difference in income between the two.

Case 5: Volvo Group

Research and Development Costs

Prepared By: Tommy Steis

November 22, 2017

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I. Case Introduction

For any firm to grow, it must invest in finding the best way to expand operations into new product offerings, markets, and technologies. Research and development's goal is to search for effective solutions to grow the company, so, naturally, there are great costs associated with such operations. This case analyzes how to account for these costs.

Volvo Group is based in Torslanda, Sweden that, annually, spends nearly SEK 13 billion in research and development aimed toward reducing the firm and their products' environmental impact. Through analyzing their yearly R&D spending, the case highlights costs associated with research and development, differences in accounting for these costs under U.S. GAAP and IFRS, qualifications for capitalizing R&D expenditures, and a comparison between Volvo and one of their U.S. competitors.

II. Research and Development Costs

Research and Development expenses include any cost related to the investigation, expansion, and execution of new markets or products. These costs fall into categories such as materials, equipment, and facilities, wages, purchased intangibles, contract services, and indirect costs. For Volvo Group, R&D costs may include costs associated with research of new technologies such as fuel efficiency, body design, vehicle components, etc., or expenses due to the expansion of current operations based on new products or markets.

III. IAS 38 Interpretation

In adhering to IAS 38 to account for research and development costs, Volvo identifies such costs as intangible assets, only if it is with great certainty that they will result in positive future cash flows and the cost of the asset can be measured. Any other cost associated with research and development is expensed. So, for initial recognition of R&D costs, Volvo expenses all research costs, and development costs are only capitalized after they establish the commercial or useful feasibility of the asset to recognize its future economic benefit.

IV. Amortization Periods

The amortization period shall reflect the useful life of the amortized asset. The useful life should mirror the number of periods the asset contributes to cash flows. Volvo may consider these factors in determining the amortization period for an asset:

- Expected use of the asset
- Related assets' useful lives
- Legal or contractual requirements that affect the useful life
- Renewable legal or contractual requirements, such as licenses
- Economic factors effect on the use of the asset

These factors are used to determine the best estimate of the useful life of the asset, which, in turn, is used to govern the amortization periods.

V. IFRS vs. U.S. GAAP – Costs and Benefits of R&D

U.S. GAAP takes a more conservative approach in handling R&D costs by requiring companies to expense each expenditure, regardless of its future economic benefit, whereas IFRS accounts for the future cash flows of the research and development costs by allowing the expenditures to be capitalized as an intangible asset.

Research and development allow companies to improve and expand their products, which contributes to growth of the firm. Of course, not all costs associated with R&D serve a financial benefit, so expensing the costs seems appropriate. However, research and development does, in some cases, contribute to economic benefit. U.S. GAAP only reflects the costs associated with R&D, while IFRS identifies both the costs, as expenses, and benefits, through capitalization, of research and development.

VI. Volvo's Product and Software Development

According to footnote 14, Volvo capitalized SEK 11,409 million in product and software development costs, net of amortization. This amount is recorded in the intangible asset line item on the balance sheet.

Cap. Product and Software, net (in EUK millions)

12,381	
	3,126
2,602	
	448
11,409	

The beginning balance of 12,381 plus the capitalized R&D costs of 2,602 minus the 3,126 of amortization of capitalized R&D gives a preliminary balance of 11,857. That balance minus the 2009 net carrying value on the balance sheet gives the plug-value of 448, which represents the other costs added/deducted from the intangible assets.

VII. Volvo's R&D Costs

Volvo's Research and Development Costs by Year			
(in SEK millions)	2007	2008	2009
1) Product and software development costs capitalized during the year	2,057	2,150	2,602
2) Total R&D expense on the income statement	11,059	14,348	13,193
3) Amortization of previously capitalized costs	2,357	2,864	3,126
4) Total R&D costs incurred during the year=1+2-3	10,759	13,634	12,669
Proportion of Total R&D Costs Capitalized	19.12%	15.77%	20.54%

The 2009 capital expenditures value used above is identified in the t-chart in part VI. Each value for Row 2 was found in the eleven-year summary consolidated income statements. The Amortization value for 2009 was also identified in the t-chart in part VI. The values in the bottom row were found taking the values in row 1 divided by the values in row 4.

VIII. Volvo vs. Navistar

Volvo Net Sales and Total Assets, given			
(in SEK millions)	2007	2008	2009
Net Sales, industrial Operations	276,795	294,932	208,487
Total assets, from Balance Sheet	321,647	372,419	332,265

Net Sales were found in the Eleven-year comparison in the notes to Volvo's financial statements. Total assets were found on the consolidated balance sheet as reported by Volvo.

2009 Comparison of Volvo and Navistar, Costs/Net Sales	
R&D Costs/Net Sales, Volvo	6.08%
R&D Costs/Net Sales, Navistar	3.83%

Volvo's total R&D costs, as found in part VII divided by the 2009 Net Sales from Industrial Operations gives 6.08%. Navistar's given figures for both R&D costs and Net Sales, \$433 and \$11,300, respectively, are divided to equal 3.83%. Volvo's proportion is slightly less than twice Navistar's, which exemplifies Volvo's greater investment in developing new products, technology, and markets.

Case 6: Splunk

Data Analytics Case

Prepared By: Tommy Steis

January 31, 2018

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I. Case Introduction

Data and analytics are a hot topic in the accounting field as of the past 5 to 10 years.

Firms are now focused on harnessing data and working to add value in their engagements with their clients. In an ever-competitive field such as accounting, firms are required to be at the leading edge of new developments. This need has created demand for data and analytics tools to add value to companies of all types.

This case has asked me to step outside of my comfort zone and research a data tool that I am completely unfamiliar with. Ultimately, it is tools like Splunk, that I will be working with in a few years as an associate. The tool I analyze below is called Splunk, and it has very interesting attributes that makes it particularly valuable for companies such as Domino's.

From this case, I have gained an understanding of data analytics tools and applicability. I better grasp the importance of data analytics and hope to apply this knowledge when I begin my career.

II. History and Purpose of Splunk

Splunk, a software platform, is used to make machine data available, understandable, and applicable to each employee in their client's company. It was created as demand grew for executives and other employees to gather meaningful information and data outside of the company's IT department. Splunk takes a part of big data, machine data, and turns it into practical, real-time metrics for businesses to make beneficial decisions. It does this by connecting directly to companies' information systems. It works somewhat like Google, but instead of searching through the internet, Splunk sorts through applications and

devices to formulate useful information. Splunk can benefit in a range of decisions, which includes changing the way a customer or employee interacts with a system or website.

III. Necessary Skills

One of the main principles that Splunk prides itself on is the ease of use for everyone in the company. Even Barb Darrow of Gigaom.com reports, “a mere mortal — not a data scientist — can work with Splunk to put that data into an easily understood visual format.” Of course, it would take some time to familiarize yourself with Splunk, but once you play around with the program, it should come naturally to all people. With a good understanding of the company, and the data that is needed, the user can use Splunk to aid in making impactful decisions. Accountants, as data and information analyzers, have the necessary skills to accurately and effectively use Splunk.

IV. Splunk’s Applicability to Audit

Splunk utilizes machine data to create meaningful information for company leadership. Because of this, Splunk is the perfect software for conducting internal user audits to show who interacts with company programs, such as SAP. Splunk would pull data to analyze how certain employees interact with the programs, the certain programs they use, and how they go about completing certain tasks. This information could lead to altering the program to be more user-friendly or eliminate wasted programs by understanding what users need, ultimately saving money.

In a similar manner, Splunk can be used to do a security audit for a client. The machine data that is created by the data security programs is hard to understand, as it is unsorted and in a not easily comprehensible machine language. In some cases, that data could be the key to finding a loophole in the security. Splunk, in this sense, becomes important for companies to find potential breaches of their network. Splunk goes into the system, gathers data from the security network, and creates a report, typically in visualizations, so an IT security team can suggest changes to protect their client's system, making the system more effective.

Splunk even offers the ability to collect, sort, and analyze financial data to support an audit staff in assessing the reliability of the information provided by the auditee. For example, Splunk will be paired with the client's systems, be asked to extract data for certain balance sheet accounts, analyze that data, and flag anything that comes across that does not match up. The ability to identify points of concern for auditors speeds up the process and creates a more accurate audit. Splunk could provide insight into a company that a human would overlook.

V. Splunk's Applicability to Tax

Splunk's application to taxes is a little less clear than that of audit, however, Splunk can also be used in a tax practice. For something as simple as a tax return, Splunk can access client data, turn it into information specific to a return, and allow the tax associate to pull the applicable information and apply it to the client's return. For example, Splunk can pull a company's income out of its system, and the associate can place it where it is needed.

In a bit more complex way, Splunk can take data from systems and sort it into potential areas of interest for tax accountants. This includes using data to help assess the potential tax burden of a client. Splunk would scan the machine data that has been created by a clients' system and sort the data that increases/decreases a company's tax liability. Once again, Splunk makes a tax accountant more efficient and effective in doing their job.

Part of a tax accountant's job is explaining how a certain business decision would affect a client's tax burden. With all the talk of the new tax code, this has become a vital offering of today's tax accountant. Splunk can aid accountants who are asked difficult questions of assessing a business decision by making financial information, both historic and current, accessible to the accountant. From this information, an accountant can, on a real-time basis, assess the current tax liability and analyze how a certain change would affect that liability, helping them to provide a more reliable solution for their client.

VI. Splunk's Applicability to Advisory

There are many facets to an advisory practice, but perhaps the most well-known service is advising mergers and acquisitions. At times, an advisor may be asked to assess the financials of a company that a client is interested in acquiring. In doing so, a consultant needs to be efficient, thorough, and accurate. Splunk could be employed to extract both historic and current information for the advisor to assess. Splunk's dashboard packages the data in a way that can be used to communicate its findings clearly and would provide value to the client.

Valuation is one of the most complex topics in accounting, and a program that could make valuation easier on human accountants would be extremely valuable. Splunk could

help do just that. By providing real-time information, and with the ability to analyze historical data to identify trends, Splunk gives accountants the tools to be more precise in their valuation. Splunk can literally take information that transcends one department or one facet of a company to analyze information that is vital for a valuator to make an estimate.

Splunk is particularly useful in analyzing where a company is doing well and where it needs to improve. By harnessing data from across the company, Splunk provides a more wholistic view for management and advisors to analyze and create a more insightful solution. For example, take a dot com business that is looking for a way to analyze its customer's actions on its website. Splunk collects the machine data from the website and uses it to create useful metrics such as "customers preferred devices." This information could call for a more mobile-device friendly website. Splunk is not limited to just this example but can be applicable across business types. Take a large food restaurant chain, who needs data from each store. Splunk can access each store's data and break it down into information by store, region, or country and simultaneously identify what those stores are doing that impact those numbers. Splunk truly is a powerful tool for advisors, auditors, and tax accountants alike.

VII. Selling Splunk

Our team needs a program that provides insight into client data that can be useful across service lines. That program, from my research, is Splunk. Splunk is applicable to any client, using any system, and has provided value for companies big and small. This tool is easily learned, has a proven track record, and gives us a competitive edge.

In some programs that have been used by accounting firms, there was a lot of training time and money that was required. This is not the case with Splunk. It has been said that Splunk takes a typical person and seemingly makes them into a data scientist, which will keep money with the firm and not spent on a program that only a few people know how to work. Splunk is also useful because it has been around for 10+ years. It has a track record that is rivaled by few, which means that it has been successful and useful to many companies. If we can implement Splunk, we will be providing our clients with the highest level of service. Splunk takes unreadable data and turns it into information an average person can understand. With talent and expertise, our colleagues can provide valuable intuition for our clients.

Splunk's capability to capture data from all facets of a company will help us to expand our services, and ultimately develop our engagement into a more wholistic and valuable experience for our client. With the right staff, who understands how to analyze the information Splunk extracts, we should not experience any staffing fluctuations. The time is now to implement a program that will make us the firm of the future.

Case 7: Rite Aid Corporation

Long-Term Debt

Prepared By: Tommy Steis

February 14, 2017

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I. Case Introduction

Companies incur long-term debt to finance a variety of undertakings, including plant expansion, fixed asset acquisition, and other business-type investments. Long-term debt takes the form of notes and bonds payable, which are issued with a stated rate and face value. The objectives of this case are to better understand accounting for long-term debt, including associated discounts and premiums, reporting requirements, and debt disclosures.

In this case, Rite Aid, the third largest U.S. retail pharmacy, has a variety of debt that must be interpreted and analyzed. In working with Rite Aid's financials, I am exposed to various debts, with different interest rates, face values, and loan requirements. By working through this case, I understand where debt disclosures are placed within the financial statements, the calculation of total debt, and the accounting behind long-term debt.

II. Rite Aid's Debt Variety

In general, there are two main types of debt: secured and unsecured. Secured debt means that the loan is secured by a debtor using an asset as collateral. If the debtor falls behind on payments, the lender has a right to repossess the asset. An unsecured loan uses no collateral, and, therefore, is unsecured. Essentially, the debtor secures a loan by backing it with an asset, so if they are not required to use an asset as collateral, they sign an unsecured loan.

Rite Aid, in its notes to the financial statements, distinguishes between secured and unsecured debt. The main reason for this is to properly disclose information to investors.

The difference between secured and unsecured debt is important to investors so that they know what is expected of the company in terms of paying off its debt. Secured debt is more important than unsecured debt because the assets of the company could be assumed if the debt is not paid. Thus, proper management of debt is important for a company to thrive.

Debt can also be “guaranteed,” which means that a third party promises to pay the debt if the debtor defaults, or cannot pay, the loan. Some lenders require debtors to have a guarantee on the loan due to their credit history or the amount of debt they undertake. It is another way that lenders reduce their lending risk. Rite Aid’s debt is guaranteed, according to Note 11 of its financial statements, completely by its subsidiaries. The company has set up a senior secured credit facility that oversees the loans and sets guidelines for the company’s debt undertaking.

Other terms that are defined in Rite Aid’s notes are “senior,” “fixed-rate,” and “convertible.” Senior debt is debt that has highest priority for being paid off in the case of a company’s liquidation. As stated above, senior debtholders can regulate the type and amount of debt Rite Aid assumes. A fixed rate loan is one in which the stated rate remains constant throughout the life of the debt, as opposed to one where the rate changes with the market rate. Lastly, a convertible bond can be converted into a stated amount of a company’s equity, typically in the form of common stock. A company issues convertible bonds for a variety of reasons, but mainly to raise equity capital without giving up more ownership than necessary and to obtain financing at a cheaper rate.

III. Rite Aid's Debt

Total Debt reflects the amount of debt from formal, written financing agreements such as loans and bonds payable. Thus, to find total debt, use the current maturities of long-term debt and lease financing obligations, long-term debt, and lease financing obligations. These values are found in the Consolidated Balance Sheet, and total debt is calculated below:

Current Maturities	\$	51,502
Long-Term Debt		6,185,633
Lease Obligations		<u>133,764</u>
Total Debt	\$	<u>6,370,899</u>

Of this amount, \$51,502 is due within the next fiscal year, which is indicated by the title "Current Maturities." Current maturities of long-term debt mean that the long-term debt is coming due within the year, as it is currently maturing.

IV. 7.5% Senior Secured Notes

Information on the 7.5 percent senior secured notes due March 2017 can be found in Note 11, under Secured Debt. The face value of this note is \$500,000, determined by the information in Note 11. When a note is recorded, the carrying value is determined by subtracting the unamortized discount, or adding the unamortized premium, from the face value of the bond. In the notes, the loan is listed for both 2009 and 2010 at \$500,000, which suggests that the note was issued without a discount or a premium.

The journal entry at issuance for this note is:

Cash	500,000	
	Notes Payable	500,000

This entry shows that Rite Aid acquired cash in exchange for the note, increasing assets and liabilities.

The journal entry for the annual interest payment reads:

Interest Expense	37,500	
	Cash	37,500

This entry suggests Rite Aid incurred interest expense on the note and paid cash to the debtholder, and therefore decreases both assets and net income.

Rite Aid records the retiring of the note by journalizing:

Notes Payable	500,000	
	Cash	500,000

This entry shows notes payable being reduced to 0 and cash being paid out for the face value of the note, thus decreasing both assets and liabilities.

V. 9.375% Senior Notes

The 9.375 percent senior notes due December 2015 are described in Note 11 as having a \$410,000 face value. Carrying value for the note is found taking the face value less the unamortized discount at a specific date. In note 11, the carrying value is identified as \$405,951, which is the \$410,000 face value less unamortized discount of \$4,049. The face value and carrying value differ because the note was sold at a discount, which means that the interest rate on the note was less than the market rate at the time the note was issued.

During fiscal 2009, Rite Aid paid \$38,438 cash to the debtholders, taking the stated rate, 9.375 percent times the face value, \$410,000. However, Rite Aid incurred \$39,143 in interest expense for the fiscal year because of the amortization of the discount on notes payable. The amortized amount for FY2009 is computed by taking the previous year's unamortized discount, found in Note 11, less the current year unamortized discount:

February 27, 2009 Unamortized Discount	\$ 4,754
February 27, 2010 Unamortized Discount	<u>4,049</u>
FY2009 Amortized Discount	\$ <u>705</u>

Thus, the total interest expense, \$39,143, is the cash interest payment, \$38,438, plus the amortized discount, \$705. The following journal entry records interest expense for fiscal 2009, and shows a decrease in net income (interest expense) and assets (Cash) with a slight increase in liabilities (discount):

Interest Expense	39,143
Discount on Notes Payable	705
Cash	38,438

The effective interest rate, when given interest expense and beginning carrying value, is computed by taking interest expense over beginning carrying value. For this example, the interest expense, \$39,143, is divided by the beginning carrying value, \$405,246, found in Note 11, resulting in an effective interest rate of 9.659 percent. The effective interest rate is the amount that is actually paid on the note due to the amortization of the discount.

Because interest expense is greater than the cash interest payment, the effective interest rate is greater than the stated rate.

VI. 9.75% Senior Secured Notes

The 9.75 percent note due June 2016, according to Note 11, was issued at 98.2 percent of \$410,000, the face value, meaning that the cash proceeds from the note is \$402,620, resulting in \$7,380 discount on notes payable. The journal entry to record the issuance of the note, showing an increase in both assets and liabilities, is:

Cash	402,620	
Discount on Notes Payable	7,380	
		Notes Payable
		410,000

As previously stated, the effective interest rate differs from the stated interest rate when the note is issued at a discount, premium, or when interest compounds more than once a year. Unlike the 9.375 percent note, the amortization is not accessible without the effective interest rate, therefore, effective interest cannot be calculated using interest expense divided by carrying value. However, effective interest rate can be computed using the present value tables, a financial calculator, or the “Rate” function in Excel. For this example, Excel was implemented:

=RATE (nper, pmt, pv, [fv], [type], [guess]), where:

nper - The total number of payment periods, found in Note 11.

pmt - The payment made each period, found taking principal*stated rate.

pv - The present value, or the cash proceeds from issuance of the note.

fv - [optional] The future value, or the principal to be paid at note retirement.

type - [optional] When payments are due. 0 = end of period. 1 = beginning of period. Default is 0.

guess - [optional] Your guess on the rate. Default is 10 percent.

So, to calculate the effective interest rate on the 9.75 percent note, the function reads:

$$=RATE(7,-39975,402620, -410000,0)$$

Using this function, the effective interest rate equals 10.1212 percent.

Therefore, an amortization schedule for the note is:

Amortization Schedule for 9.75% Note				
Date	Cash PMT	Interest Expense	Discount Amortization	Carrying Value
Jun-09				\$ 402,620
Jun-10	\$ 39,975	\$ 40,750	\$ 775	403,395
Jun-11	39,975	40,828	853	404,248
Jun-12	39,975	40,915	940	405,188
Jun-13	39,975	41,010	1,035	406,223
Jun-14	39,975	41,115	1,140	407,363
Jun-15	39,975	41,230	1,255	408,618
Jun-16	39,975	41,357	1,382	\$ 410,000

The June 2009 Carrying Value is the initial cash proceeds from the bond. The cash payment is the face value of the bond times the coupon rate of the bond and is the same for every period. Interest expense is the previous year's carrying value times the effective interest rate, and amortizing the discount increases the carrying value of the bond each year.

The journal entry to record interest expense on February 27, 2010, demonstrating a decrease in net income and an increase in liabilities, is:

Interest Expense	27,167
Discount on Notes Payable	517
Interest Payable	26,630

At the end of the fiscal year, which for Rite Aid is on February 27, the Note has only been issued for 8 months, so the values at February 27 can be found by multiplying the values found for June 30 in the amortization schedule by eight-twelfths, resulting in the journal entry values.

The carrying value of the note, as of February 27, 2010, is the previous year's carrying value, \$402,620, plus the amortized discount on notes payable, \$517. Therefore, the carrying value of the note on February 27, 2010 is \$403,137.

Case 8: Merck & Co., Inc. and
GlaxoSmithKline plc

Shareholders' Equity

Prepared By: Tommy Steis

February 22, 2017

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I. Case Introduction

Companies finance growth and other initiatives by issuing stock. Shares of stock represent ownership in a company. Stock can come in the form of common stock, preferred stock, and treasury stock. Common shareholders have voting rights, transfer rights, dividend rights, etc. Preferred stock has preference to dividends, assets in the event of liquidation, is convertible into common stock, and is callable. Treasury stock is stock that has been repurchased by the corporation. Companies do this to provide tax benefits to shareholders, increase financial ratios, provide employee stock compensation, to reduce share of ownership, and to establish a market for the stock.

Merck & Co., Inc. is a global pharmaceutical company that produces goods that improve human and animal health. In this case, we look at Merck's equity and financing activities as they relate to the company structure. Merck uses all three categories of stock, and we dive deeper into the concepts behind the company's capital structure.

II. Merck's Common Shares

Information regarding Merck's equity can either be found in the balance sheet, or the notes to the financial statements. The common shares authorized is in the equity section of the balance sheet, and Merck is authorized to issue 5,400,000,000 shares. As of December 31, 2007, Merck has issued 2,983,508,675 common shares, which is also found on the balance sheet. These shares multiplied by the par value, \$.01, reconciles the dollar value given on the balance sheet of \$29.8 million.

The common shares held in treasury, as of December 31, 2007, can also be found on the balance sheet, and is 811,005,791 shares. To find the number of common shares

outstanding, take the common shares issued, 2,983,508,675, and subtract the shares held in treasury, 811,005,791. Thus, the common shares outstanding are 2,172,502,884.

Total market capitalization can be computed as:

$$\begin{array}{r} \# \text{ of shares outstanding: } \quad \mathbf{2,172,502,884} \\ \text{Market Price/Share: } \quad \mathbf{x \quad \$ \quad \underline{\underline{57.61}}} \\ \mathbf{\$ 125,157,891,147} \end{array}$$

III. Dividends

Dividends are paid by companies for various reasons. First, and foremost, paying a dividend that steadily increases over time attracts investors. Investors like to see a return on their investment, and dividends provide the most visible return. In addition, dividends can show signs of a strong company, which attracts investors. Typically, when a company pays dividends, its stock price drops. This occurs because the stock price is calculated using future cash flows, so right after a dividend payment, the future cash flows are affected. Also, if a dividend payment is less or more than expected, the price of the stock will reflect the payment.

IV. Stock Repurchase

Companies sometimes repurchase their stock from shareholders for the market price. This benefits the company in multiple ways, which includes ownership consolidation and to take advantage of undervaluation. Common stock represents one stake in the ownership of the company, which includes the right to vote on company issues. To raise capital for growth or other projects, companies issue stock. However, if a company has no plans for

large, funded growth, they are sharing ownership for essentially no purpose. An undervalued stock can be taken advantage of by a company who wishes to purchase treasury stock. When a stock is undervalued, the company can buy back the shares, then reissue them when the market corrects itself. This raises more capital for the company without issuing additional shares.

V. Merck's Common Dividend Activity

The following journal entry records Merck's common dividend activity for fiscal 2007:

Retained Earnings	3,310,700,000	
	Cash	3,307,300,000
	Dividends Payable	3,400,000

Dividends declared, represented by retained earnings in the entry, is found in Merck's Consolidated Statement of Retained Earnings. The cash paid to stockholders in the form of dividends is found in the financing section of the Statement of Cash Flows. The difference is Dividends Payable, which represents the number of dividends declared that have not yet been paid to investors.

VI. Merck's Treasury Stock

Merck uses the cost method to account for the treasury stock. The cost method states that the cost of repurchasing the stock is the amount at which you record the treasury stock. GAAP requires the use of the cost method, and Merck discloses this on the face of the balance sheet. According to Note 11, Merck purchased 26.5 million shares of common stock for \$1,429.7 million during fiscal 2007. Thus, on average, Merck bought the stock

for \$53.95 per share. Treasury stock purchases are classified as a financing activity because it changes stockholders' equity, and a change in stockholder equity, because equity is used to finance the firm, is shown in the financing activities section of the cash flow statement.

Assets, according to Kieso, Weygandt, and Warfield in their Intermediate Accounting textbook, are likely future economic benefits attained or held by an entity because of past transactions or events. Treasury stock is ownership interest in the company, as it is a share of the company's ownership. Treasury stock can either be resold or held forever. Thus, it is not likely that the company will receive future economic benefits. Also, because treasury stock is ownership interest, it must be classified as stockholders' equity.

VII. Merck's Dividend Information

Merck's Dividend Information		
	2007	2008
Dividends Paid	\$ 3,307.3 million	\$ 3,322.6 million
Shares Outstanding	2,172,502,884	2,167,785,445
Net Income	\$ 3,275.4 million	\$ 4,433.8 million
Total Assets	\$ 48,350.7 million	\$ 44,569.8 million
Operating Cash Flows	\$ 6,999.2 million	\$ 6,756.2 million
Year-end Stock Price	\$ 57.61	\$ 41.94
Dividends per Share	\$ 1.52	\$ 1.53
Dividend Yield	2.64%	3.65%
Dividend Payout	100.97%	74.94%
Dividends to Total Assets	6.84%	7.45%
Dividends to Operating Cash Flows	47.25%	49.11%

Merck's dividend ratios did not change much between 2006 and 2007. As you notice, the dividends paid in 2006 were slightly higher than 2007. This caused dividend yield,

dividend to total assets, and dividends to operating cash flows to all decrease. Stock price increased quite a bit despite the one cent decrease in dividends per share. Lastly, Merck's net income declined more than its dividends paid, so the dividend payout increased by over 25%.

Case 9: State Street Corporation

Marketable Securities

Prepared By: Tommy Steis

April 4, 2018

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I. Case Introduction

Financial services firms buy and sell debt and equity investments as part of their central business operations. Firms generate revenue by investing in securities in two primary ways. First, firms make money by buying and selling securities that have appreciated in value. Firms, under this mindset, focus on the mantra of, “Buy low, sell high.”

Essentially, if a firm buys a security for a lower price than what they sell it for, they make a profit. Secondly, firms can generate revenue by receipts of interest or dividends. Debt investments, in which companies have issued bonds to fund their growth, pay interest on the borrowed money. Equity investments, such as stocks, pay dividends to give a share of the ownership its piece of the profit. Firms have motivations to invest in various types of securities, but their one main goal is to gain the highest rate of return possible.

State Street Corporation is a financial services firm located in Boston, MA. Their focus is to serve institutional investors in their investing needs. Because investing is at the core of their business, State Street has a variety of financial holdings. In this case, I am asked to explore the accounting principles behind various types of debt and equity investments by analyzing State Street’s financial statements and accompanying notes. By doing so, I highlight the intricacies of accounting for financial securities and gain an understanding of the standards surrounding such methods.

II. Trading Securities

Trading securities are debt or equity securities, such as stocks, bonds, and similar marketable securities, that companies hold with intent to sell in the short term. A security

gets the title “trading” through the company’s intent to frequently buy and sell, therefore making a profit in temporary price differences.

When a company holds a trading security, and that security pays interest or a dividend, the company records the benefit received as revenue. According to Kieso, Weygant, and Warfield, in the 16th edition of Intermediate Accounting, revenues are, “Inflows or other enhancements of assets of an entity or settlements of its liabilities during a period from delivering or producing goods, rendering services, or other activities that constitute the entity’s ongoing major or central operations.” For a financial holding company, like State Street Corporation, or any company that invests as a major operation, holding such securities is a part of their central operations. Thus, they should treat any inflow resulting from holding their assets as a revenue. The journal entry for a company that receives \$1 of dividends or interest is:

Cash	1
Interest/Dividend Revenue	1

According to the FASB, companies are to report trading securities at fair value, where unrealized holding gains and losses flow through net income. The Fair Value standard is used because a trading security is meant to be sold quickly on the market, so users of financial statements should know the market value of the investment. The Fair Value Adjustment account is used to recognize the increase in market value and is reported on the balance sheet under the corresponding asset. In a similar manner, unrealized holding gains and losses are stated, for trading securities, on the income statement so stakeholders are provided with relevant information. Therefore, the journal entry for an increase in market value of a trading security is:

Fair Value Adjustment	1
Unrealized Holding Gain-Income	1

III. Available-for-Sale Securities

Available-for-Sale Securities are debt or equity securities that companies intend to eventually sell, but do not intend to rapidly trade. Available-for-Sale securities are reported at fair value after an adjustment for amortization, and unrealized holding gains and losses flow through other comprehensive income.

The receipt of dividends or interest is treated the same between available-for-sale and trading debt securities for the same reason. Companies who hold debt investments do so as a core business process. As a company generates inflow using its assets, it recognizes revenues on the benefits received. Therefore, a company that receives \$1 of interest or dividends by holding available-for-sale securities records the entry as follows:

Cash	1
Interest/Dividend Revenue	1

According to the FASB, companies report available-for-sale securities at amortized cost, then adjusts it to fair value. This method is adopted for two reasons. One, because a company is potentially holding on to these securities for an extended period, any discount or premium the bonds were bought at must be amortized over the life of the bond, directly impacting the asset, Debt Investment, account. Second, the company intends to sell the security, so, to provide relevant information to stakeholders, the company must adjust to the fair value of the asset, using the fair value adjustment account. In addition, any unrealized holding gain or loss that arises from fair value adjustments flow through comprehensive income to equity. Companies do not report adjustments in fair value for

available-for-sale securities in net income until after they sell the security to reduce the variability of net income. If a company constantly adjusts an available-for-sale security, which they hold for multiple periods, net income will fluctuate multiple times throughout those periods. Recognizing changes in fair value through comprehensive income prevents such volatility.

The journal entry to record an \$1 increase in market value for an available-for-sale security is:

Fair Value Adjustment	1
Unrealized Holding Gain-Equity	1

IV. Held-to-Maturity Securities

Held-to-Maturity securities are debt investments that companies intend to hold until its maturity date. Held-to-Maturity securities can only be securities that have a finite life, such as bonds, whose principle is due at a certain date. Therefore, equity securities, i.e. stocks, because they have infinite lives, can never be classified as held-to-maturity.

Companies may only classify a security as available-for-sale if it has positive intent and the ability to hold the investment until maturity.

Companies record held-to-maturity securities at amortized cost. Amortized cost is used, as opposed to fair value adjustment, since the company intends to hold the security until its maturity date, therefore, never selling the bond. If the company does not intend to sell the bond, an adjustment to market value, or the price for which you could sell the security, is irrelevant. In other words, the market value of a held-to-maturity security does not provide information on the cash flows resulting from holding that security and is

useless to users of the financial statements. In addition, because there is no fair value adjustment, there are no unrealized holding gains to contribute to net income or comprehensive income. Therefore, there is no entry necessary to adjust to an increase of \$1 to market value of a held-to-maturity security.

V. State Street's Trading Securities

The balance of State Street's trading securities can be found on their balance sheet and is reported as \$637 million. The market value of trading securities is also \$637 million because State Street reports the investments at fair value on the balance sheet, as described in Note 1 of the Notes to Consolidated Financial Statements. These securities are expected to be sold in the short-term. State Street's trading activities employ frequent buying and selling to generate profits in the short-range.

Also described in Note 1 is the process State Street uses to record unrealized holding gains or losses on trading securities. As defined, State Street records such unrealized holding gains and losses in the "Trading Services Revenue" account on the income statement. The fair value adjustment for the trading securities for 2012, if the previous fair value of the assets was \$552 million, is:

Fair Value Adjustment (Trading Account Assets)	85,000,000
Trading Services Revenue	85,000,000

VI. State Street's Held-to-Maturity Securities

The 2012-year end balance of the Investment securities held to maturity account is \$11,379 million, as found under the assets section on State Street's balance sheet. The

market value of the held-to-maturity securities is also provided in a parenthetical note on the balance sheet, and it is \$11,661. However, State Street does not report the fair value as the value of the held-to-maturity securities, because, as described above, that is not proper treatment of such securities.

State Street does report the amortized cost of the held-to-maturity securities, which is \$11,379 million. Amortized cost reflects the purchase price of the bond plus/minus any amortization that has occurred. Amortization recognizes the conversion of a premium or discount on the bond into interest revenue. Essentially, a bond is bought below or above its face value because of a difference in the stated interest rate and the interest rate of the market at the purchase date. To accurately reflect the expected cash flows to be received by holding the bond, the company is required to amortize the difference between the purchase price and the face value of the bond over the life of the security. At the maturity date, the bond will have a book value that is equal to its face value, made possible through recording the investment at amortized cost.

The difference between amortized cost and market value is the difference between the interest rate on the bond and the market interest rate. For State Street, the Fair Value of held-to-maturity securities is \$11,661 million and the amortized cost is \$11,379. This large of a difference suggests that the market rate has dropped lower than the stated rate of the bonds. If a bond is offering an interest rate that is higher than what a buyer could expect to purchase on the market, the price, or market value, for that bond is going to be higher than its face value. If a bond is offering an interest rate lower than what a buyer could expect to purchase on the market, the market value for that bond is going to be lower than its face value. Since the market value is higher than the amortized cost of the

bond, it is safe to assume that the held-to-maturity securities' interest rates are higher than the market rate.

VII. State Street's Available-for-Sale Securities

The 2012-year end balance in the Investment securities available for sale account is \$109,682 million as found on State Street's balance sheet. This represents the amortized cost of the available-for-sale securities plus the fair value adjustments associated with these investments, which State Street accurately records as described in section III above. The difference between the fair value and amortized cost of the available-for-sale securities gives the unrealized holding gain (loss). The computation to find the unrealized holding gain (in millions) is:

Fair Value, AFS Securities:	\$ 109,862
Less: Amortized Cost:	<u>108,563</u>
Unrealized Holding Gain (loss):	<u>\$ 1,119</u>

In the Notes to Consolidated Financial Statements, under Note 4, information regarding realized gains from the sale of available-for-sale securities is found. In 2012, realized gains amounted to \$101 million and realized losses \$46 million. Thus, a gain of \$55 million dollars was realized on the sale of available-for-sale securities. This gain would be recognized on the income statement as an increase to net income. As described in section III, gains are not recognized in the income statement on available-for-sale securities until they are sold, to reduce the volatility of net income. They are now recognized on the income statement. On the statement of cash flows, the sale of any

investment, including available-for-sale securities would be classified as an investing activity, as it deals with the investments in debt and equity securities.

VIII. State Street's AFS Journal Entries

To record the purchase of available-for-sale securities in 2012, State Street made the following journal entry (in millions):

Equity Investments (AFS)	60,812
Cash	60,812

This entry records the receipt of an asset (equity investment) for the payment of another asset (cash) at cost.

The amount of purchases and proceeds from sales of available-for-sale securities was given in the problem.

To record the sale of available-for-sale securities in 2012, State Street made the following journal entry (in millions):

Cash	5,399	
Unrealized holding gain-Equity	67	
Equity Investment (AFS)		5,411
Realized Gain on Sale of AFS		55

This entry recognizes the receipt of cash for the sale of the equity investment. To compute the values, it is given that State Street received \$5,399 million in cash for the sale of available-for-sale securities. In section VII, the realized gain on sale of available-for-sale securities was found to be \$55 million. Then, State Street must remove the current value associated with the securities. The unrealized holding gain associated with

the sold securities is given in the problem as \$67 million. Thus, to record the value of the equity investment, State Street balanced the entry by recording a credit to Equity Investment (AFS) of \$5,411 million.

The original cost of the available-for-sale securities can be found using gain equals proceeds from sale minus the book value of the investment. The computation to find the original cost (in millions) of the securities is below.

Proceeds from Sale of AFS Securities	\$ 5,399
Less: Realized Gain on Sale of AFS Securities	<u>55</u>
Original Cost of AFS Securities	<u><u>\$ 5,344</u></u>

Case 10: ZAGG, Inc.

Deferred Income Taxes

Prepared By: Tommy Steis

April 2, 2018

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I. Case Introduction

Public companies' financial statements are required to follow the standards laid out by U.S. GAAP. However, measuring taxable income and income taxes does not follow the same standards. The differences that arise from the discrepancies between U.S. GAAP financial reporting and tax accounting result in deferred income tax assets and deferred income tax liabilities. These amounts are derived from temporary differences in income between the financial statements and tax return. Temporary differences occur based on timing differences between financial reporting and tax accounting and is examined below.

ZAGG designs mobile device accessories, and, in doing so, has become an industry leader. They are a public company that must adhere to GAAP, but, due to the tax code, their computation of taxable income differs from pretax financial income. This case observes, through ZAGG, the accounting for deferred income tax amounts, by examining the computations to calculate the income differences, accounting for deferred tax liabilities and assets, and studying the income tax components and terms that are common in everyday business.

II. Book Income

Book income refers to pretax financial income, or the reported amount on the income statement that adheres to GAAP. For ZAGG, 2012 book income is reported on the income statement as "Income before provision for income taxes," which amounts to \$23,898,000. Taxable income disregards GAAP reporting rules, and, thus, differs from financial income. In other words, taxable income excludes some revenues and expenses

that are reported under GAAP. There are also timing differences between reporting under the tax code and GAAP in recognizing income components because tax reporting primarily uses a modified cash basis and GAAP uses the accrual basis. The cash basis recognizes revenues and expenses when cash is exchanged, regardless of whether the performance obligation is met. However, under GAAP, companies are required to recognize revenues and expenses once the performance is completed. Therefore, taxable income may include revenues and expenses that the income statement does not.

III. Tax Terms

Permanent tax differences are revenues and expenses that are recorded on the income statement under GAAP but can never be included in taxable income based on the tax code. Permanent tax differences arise from nontaxable items such as interest revenue on U.S. treasury bonds. This interest revenue is reported on the income statement but is not taxable because the government does not want to deter people from investing in U.S. debt. The difference in income between the financial statement and tax return will never reverse, or even out, because the permanent difference will never be a taxable amount. Temporary tax differences arise from timing differences between recognizing revenues and expenses on the income statement and tax return. As discussed in Part II above, the use of the cash basis of accounting for tax purposes and accrual for book purposes results in these differences. For example, rent can be paid to a company for future periods. On the tax return, that rent is recognized as revenue the day that the cash is received. However, on the financial statements, rent revenue is not recognized until the

performance obligation is met. Thus, a temporary difference, or timing difference, arises, leading to a deferred tax liability.

Statutory tax rates are mandated by law in the country in which the company is incorporated. Whereas the effective tax rate is the rate the company pays based on certain tax breaks, such as loopholes, deductions, exemptions, and credits. The effective tax rate is computed by taking the tax expense divided by pretax income.

IV. Income Tax Expense

ASC 740 are accounting and reporting standards that concerns effects of income taxes from a company's operations during present and previous years. It focuses on the amount of tax liability a company undertakes for the current year and the accounting for temporary differences that result in future taxable or deductible amounts. ASC 740 observes four topics: Overall, Intraproduct Tax Allocation, Other Considerations or Special Areas, and Interim Reporting. For purposes of this case, ASC 740-10 Overall will be the focus.

ASC 740-10 directs the accounting method and amount of taxes that directly or indirectly affect the difference between taxable income and pretax financial income. It focuses on the computation of income taxes payable and income tax expense based on the effects of deferred income taxes. In general, it discusses the components of income tax expense.

According to GAAP, the matching principle must be followed by companies and states that expenses on the income statement must be in the same period as related revenues. To put this into tax terms, as ASC 40-10 does, deferred income tax expense should be recognized in the same period as its associated revenues. Basically, deferred tax expenses

arise from timing differences based on the differences between GAAP and the tax code. So, a deferred tax amount relates to the difference between the income statement and tax return, not differences in timing between expenses and revenues on the income statement. To adhere to the matching principle, a company must report deferred tax expenses as part of the income tax expense for the period that the associated revenues are recognized. To further illustrate the reporting requirements for a company, here is a sample income tax expense portion of the income statement:

Income before Income Taxes		xxxxx
Less: Income Tax Expense		
Current	xx	
Deferred	<u>x</u>	<u>xxx</u>
Net Income		<u><u>xx</u></u>

As you can see, the income tax expense is made up of both current tax expense and deferred tax expense. The current portion is the amount of taxes that the company expects to owe in the current period, whereas the deferred portion is calculated by examining changes in deferred tax amounts to quantify the effect on the income statement. While the deferred tax amounts refer to future deductible/taxable amounts, the revenues/expenses that cause the deferred tax amounts are recognized in the current period, and thus, in accordance with the matching principle, must be recognized as an expense in the current period.

V. Deferred Tax Assets and Deferred Tax Liabilities

Deductible temporary differences result in deferred tax assets. Essentially, deferred tax assets signify the increase in taxes saved in the future stemming from deductible temporary differences in the present. Deductible temporary differences occur when the taxable income is higher than pretax financial income. There are numerous reasons why this difference would occur. For example, Company X has a loss and related liability on its income statement due to ongoing litigation. While the company can recognize this loss on their income statement, they cannot reduce taxable income due to the loss until it pays the liability. Therefore, Company X pays more taxes in the current year because its taxable income does not include the litigation loss, than it will in subsequent years, when the loss is recognized on the tax return. In other words, there is a temporary difference between financial income and taxable income, resulting in a future deductible amount. Future deductible amounts lead to deferred tax assets, which will be reversed in the periods that payment for the litigation occurs.

On the other hand, taxable temporary differences result in deferred tax liabilities. A deferred tax liability indicates an increase in income taxes payable in the future in response to a taxable temporary difference in the present. Taxable temporary differences occur when pretax financial income is greater than taxable income. Due to this difference, deferred tax liability is the amount that a company is expected to pay out in the future. A common example of a source of deferred tax liability is the difference in depreciation calculations between the book and tax return. For financial reporting, companies typically use the straight-line method of calculating depreciation expense, while the tax code allows for use of an accelerated depreciation method. Due to the

straight-line method's lower depreciation as compared to an accelerated method, a temporary difference exists where the book income is higher than taxable income, resulting in a deferred tax liability.

VI. Deferred Income Tax Valuation Allowance

Deferred tax assets are recognized for deductible temporary differences, as described above. However, if it is more likely than not that a company will not realize a portion or all the deferred tax asset it should reduce the asset by a valuation allowance. The valuation allowance is a contra deferred tax asset account that is used to recognize that a loss in subsequent years will result in the deferred tax asset not being used. So, a company has a deferred tax asset, but based on available evidence, it believes that it will not use the entire asset due to expected net losses in future years. The company will not use the deferred tax asset, so it must reduce the asset to its expected realizable value. In other words, a company must determine whether sufficient taxable income exists to offset the deferred tax asset. If taxable income will not exist, a valuation account is required to reduce the asset to its carrying amount.

VII. ZAGG's Income Tax Components

To record the income tax provision for fiscal 2012, ZAGG inputs this journal entry (in thousands):

Income Tax Expense	9,393	
Deferred Tax Asset, Net	8,293	
Income Tax Payable		17,686

The Income tax expense is found on the income statement as “Income tax provision.”

The deferred tax asset, net is found within Note 8 of the financial statements. Income tax payable is the plug number but can also be found on the balance sheet.

To further understand the journal entry above, the deferred tax asset, net is composed of deferred tax asset and deferred tax liability. In Note 8, total deferred tax assets are given as \$14,302,000 for 2012 and \$6,300,000 for 2011. To find the deferred tax assets accrued over the current year, subtract 2012’s DTA by 2011’s DTA to give \$8,002,000. The same process can be repeated to find the deferred tax liability: take 2012’s total deferred tax liability, \$794,000, and subtract it by 2011’s, \$1,086,000, to compute the deferred tax liability accrued over the year, \$(291,000). This journal entry summarizes the effect of the deferred tax asset and deferred tax liability on income tax expense and income tax payable (in thousands):

Income Tax Expense	9,393	
Deferred Tax Asset	8,002	
Deferred Tax Liability	291	
		Income Tax Payable
		17,686

Where the deferred tax asset and deferred tax liability can be summarized by the account, “Deferred Tax Assets, Net.”

As previously discussed, the effective tax rate is the rate at which a company actually pays its taxes, whereas a statutory rate is the rate at which law requires them to pay.

Effective tax rate can be computed by dividing income tax expense by pretax financial income. For ZAGG, income tax expense is \$9,393,000 and pretax financial income is

\$23,898,000, both found on the income statement. Based on this computation, ZAGG's effective tax rate is 39.3 percent.

In Note 8, ZAGG's net deferred income tax asset balance is \$13,508,000. This amount appears on the balance sheet in the form of current and noncurrent deferred tax assets. To illustrate, take the 2012 current DTA and add 2012's noncurrent DTA:

2012 Current Deferred Tax Asset	6,912,000
2012 Noncurrent Deferred Tax Asset	<u>6,596,000</u>
Total Deferred Tax Asset, Net	<u>\$ 13,508,000</u>

Case 11: Apple Inc.

Revenue Recognition

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I. Case Introduction

One of the most important financial measures is revenue, so it must be accurately and appropriately recognized to be useful to company stakeholders. Revenue gives a peak into the future performance of a company and drives the successes of businesses. Because of revenue's importance, the FASB and IASB have provided strict guidance on revenue recognition and related issues. In recent years, the FASB and IASB have developed AFS 606 and IFRS 15, respectively, to clear concerns and restore confidence around revenue reporting. Their initiative resulted in a sounder framework for revenue recognition, enhanced comparability of revenue across units, abridged financial statement preparation, and improved disclosures to aid in reporting. The new standard follows an asset-liability approach as its basis, which identifies revenues grounded on fluctuations in assets and liabilities. These assets or liabilities arise from contracts with customers and follows the revenue recognition principle of recognizing revenue in the period in which the performance obligation is completed.

This case focuses on the application of ASC 606 by Apple Inc. It gives a brief overview of revenue recognition, discusses the intricacies of ASC 606, and highlights Apple's use of the standard. Apple Inc. provides an in-depth look at the treatment of revenue items in accordance with ASC 606, and emphasizes a gain in understanding of the implications of the new standard. By using Apple's most recent financial reporting package, I have gained an understanding of where certain information regarding revenue recognition is contained and how a company interprets and employs ASC 606.

II. Revenue Definition

Revenue is the increase in assets that are caused by a company's central operations.

Revenues can come in different forms. Some companies gain revenue through holding investments and gaining interest or dividends on those investments. Other companies sell goods to increase revenue. Simply put, revenue arises from the exchange of goods or services.

Gains, on the other hand, are increases in assets or equity that stem from a company's peripheral transactions. Essentially, any event that increases assets or equity that cannot be classified as a revenue because it is not a part of a company's central operations is a gain. For example, a company sells a piece of equipment that it uses to produce a good.

The equipment has a book value less than the market value of what the company received. Because selling equipment is not the company's main operation, the difference between the book value of what was given up and the fair value of what was received results in a gain on the sale. Therefore, a gain refers to incidental or nonrecurring transactions whereas revenue is generated through main operations.

III. ASC 606 and Revenue Recognition

To recognize revenues is to record completion of a performance obligation, and, thus, to increase revenue based on the sale of a good or service central to the company. The FASB, along with IASB, issued new revenue recognition criteria named *Revenue from Contracts with Customers*. This new standard provides for uniformity amongst companies who follow either standard setting body, with a few minor discrepancies. In

short, ASC 606 and IFRS 15 describes the steps necessary to recognize revenue when a contract exists between a customer and the company. These steps are:

1. Identify the contract with a customer (FASB ASC 606-10-25-1 through 25-8)

The following criteria must be met to account for revenue as a contract with a customer:

- The parties have approved the contract.
- The contract has commercial substance, or there is an exchange of value.
- The contractual obligations can be identified.
- Payment terms are identifiable.
- Probable collection of consideration exists

If a contract exists under these criteria, the company moves to the next step. If a contract does not exist, however, the company can only recognize revenue if one or more of these criteria are satisfied:

- There are no remaining obligations, and substantially all the nonrefundable consideration has been received by the company.
- Termination of the contract occurred.
- Transfer of control of the company's obligation has occurred and the relating consideration has been received.

2. Identify separate performance obligations within the contract. (FASB ASC 606-10-25-14 through 25-22)

According to Kieso, Weygandt, and Warfield in the 16th edition of Intermediate Accounting, a performance obligation constitutes, "...A promise to provide a product or service to a customer," (987). In this step, the company must identify whether the performance obligation is distinct. If it is distinct, the company may recognize revenue when the distinct obligation is completed. If it is not distinct, the obligation must be grouped into similar obligations, resulting in clear distinction. In this grouped obligation, revenue must not be recognized until all performance obligations surrounding the grouping are complete.

3. Determine the Transaction Price (FASB ASC 606-10-32-2 through 32-27)

Transaction price is the quantity of consideration a company expects to collect from the purchaser in exchange for the performance obligation.

The components of transaction price that must be considered are:

- Variable Consideration
 - When the price of the consideration is reliant on future events, making it variable consideration, the company must use either the expected value of the transaction price or the most likely amount to be collected.
- Time Value of Money
 - When a significant financing component exists, for example interest being paid over time, the company must consider the time value of money. The present value of the future cash flows constitutes the transaction price.

- Noncash Consideration
 - It is not unusual for companies to receive goods, services, etc. for their performance obligation. In these cases, the transaction price is computed as the fair value of what is received.
- Consideration Paid or Payable to Customers
 - Companies often institute discounts, rebates, coupons, and free products or services to customers in exchange for a performance obligation. The amount of these additional considerations must be deducted when determining transaction price.

4. Allocate the Transaction Price to Separate Performance Obligations
(FASB ASC 606-10-32-28 through 32-41)

If there are multiple performance obligations in a contract, the company must allocate the transaction price to the respective obligations based on the fair value of each obligation. To determine the fair value of the performance obligations, companies use the standalone price, or what the company could receive if selling the good or service by itself. If this information is unavailable, the company must estimate the fair value of the obligation.

5. Recognize Revenue as Each Performance Obligation is Completed (FASB ASC 606-10-25-23 through 25-37)

Satisfaction of the performance obligation occurs when the customer obtains control of the good or service, which occurs when one of the following indicators, provided by Kieso, Weygandt, and Warfield (1994) is identified:

- The company has a right to payment for the asset.
- The company has transferred legal title to the asset.
- The company has transferred physical possession of the asset.
- The customer has significant risks and rewards of ownership.
- The customer has accepted the asset.

In some cases, customers, instead of satisfying performance obligations at a point in time, do so over a period of time, thus recognizing revenue over time. This occurs if one of the following criteria is met:

- The company performs the requirement while the customer accepts and consumes the benefit.
- The customer obtains control of the asset as it is constructed or improved.
- A company produces custom order goods or services that the customer receives the benefit of or the company has a right to payment.

The new standard's goal is to provide a framework to ensure that revenue is recognized when it is actually earned, not just when a contract/obligation exists.

IV. Apple's Revenue Recognition

According to Apple Inc.'s 2017 Form 10-K, the company recognizes revenue when a contract exists, delivery has occurred, a transaction price is identifiable, and collection of that price is probable (Note 1, 44). For Apple, the criteria are usually satisfied at the time the product is shipped. For online sales, the company does not recognize revenue until the customer receives the product because Apple retains some of the risk associated with transfer of the good. In essence, the company follows the revenue recognition standards described above. The following discussion analyzes the recognition standard Apple uses and its relationship to the standard set by the FASB.

Apple recognizes revenue when "persuasive evidence" of a contract exists. It is safe to determine that Apple uses the contract criteria described in Part III to determine the validity of an agreement. Apple recognizes revenue when the product is delivered, in accordance to Step 5 of the FASB's revenue recognition process, which states that one indicator of the transfer of goods is when the customer obtains control of said goods. Apple recognizes revenue when the transaction price is determinable, and collection is likely. The company stands by ASC 606 in determining the transaction price and only recognizing the transaction price if collection is probable.

V. Multiple-Element Contracts

Multiple-Element contracts refer to contracts with multiple, or bundled, performance obligations. For example, a computer has related software that is necessary for the computer to run. While Apple may be able to sell each good on its own, it must determine the transaction price for the obligation of selling each of them together to

accurately recognize revenue associated with such an obligation. The issues that arise concerning multiple-element contracts are determining separate performance obligations, as describe in Part III, and allocating the transaction price to each performance obligation. To combat these issues, Apple appropriately allocates revenue to all obligations based on their standalone prices. Apple has developed a hierarchy to determine the fair value of these goods:

1. Vendor-Specific Fair Value
2. Third-Party Selling Price
3. Best Estimate Selling Price

If the first step cannot be determined, Apple gathers information from the next step to determine the standalone price. Once again, Apple, in implementing this method of accounting for multiple-element contracts, is in accordance with ASC 606.

VI. Revenue Misstatements: Management Incentives

Fraud occurs in every function of businesses, and, therefore, must be combatted by companies implementing proper controls over each function. There are multiple incentives surrounding fraud, but, more specifically, revenue recognition is an easy way for managers to make self-serving decisions. For example, a sales manager may be responsible for a certain region or customers. Upper-level management has set sales goals for the employee that are tied to bonuses and promotions. The sales manager wants to please his bosses and must hit certain targets to do so. She may have the opportunity to create an invoice or otherwise manipulate revenue to hit those sales goals, even if the performance obligation has not been met. The incentives may not only affect a sales

manager. Upper-level management may want to manipulate revenue to increase the bottom line, resulting in beating market estimates, improving stock price, and appeasing the board of directors. Essentially, sales drive the business, and more sales means better business. Incentives are therefore plentiful in manipulating revenue to self-serve.

VII. Apple Products' Revenue Recognition

The following describes how each Apple Products' revenue should be recognized based ASC 606.

1. iTunes songs sold online

Once a customer clicks on and follows the steps to purchase an iTunes song online, a contract exists between Apple and the customer. Based on ASC 606, the parties have approved the contract (Apple through its Terms and Conditions and the customer through its action and payment). The transaction price is determined by Apple, typically \$1.29, and is agreed to by the customer at the time of purchase. Revenue must therefore be recognized when the customer obtains control of the song, so Apple should recognize revenue when the customer has successfully downloaded the song, just moments after the purchase is made, in accordance with FASB ASC 606-10-25-23 through 25-37.

2. Mac-branded accessories sold in Apple Stores or Online

Revenue should be recognized for accessories sold in stores once the transaction takes place and payment for the good is processed. In this case, the parties have agreed to the contract, the transaction price is determinable, and

the performance obligation has been completed. Revenue should be recognized at the time of purchase for in-store purchases because the company has transferred physical possession of the asset and the customer has accepted the asset. If a customer returned the accessory, Apple would establish a contra-revenue account such as sales returns and allowances.

For online purchases, Apple should not recognize revenue until the good has been delivered to the customer. The performance obligation is only satisfied when the customer obtains control of the good, and this does not occur until the good is delivered.

3. iPods sold to a third-party reseller

A third-party reseller buys Apple's products and then sells them at a premium to their own customers. Because the third-party vendor assumes risks and rewards of ownership of the goods and has accepted the asset, Apple recognizes revenues at the time the third-party vendor obtains control of the goods, as is stated in ASC 606. Essentially, there is little difference in recognizing revenue between Apple selling to a third-party reseller and a customer that buys a product online directly from Apple.

4. Revenue from Gift Cards

Gift cards can be thought of as prepaid expenses, through the customer's perspective. If I go to the store and purchase a gift card, I am paying for an amount that I will be able to use in the future. Thus, a gift card is an asset to me. On the other hand, the company, in granting me a gift card, has an

obligation to redeem my gift card for goods exchanged in the future, thus representing a liability.

How, then, can revenue be recognized in the use of a gift card? There are two parts to a gift card transaction: the purchase of the gift card, which results in a liability, unearned revenue, and the redemption of the gift card, in which a good is exchanged for the reduction of the company's gift card liability. Revenue is therefore recognized when the purchaser uses the gift card to pay for the assumption of control of the good. At that time, the entry would look something like this:

Unearned Gift Card Revenue (liability account)	xx
Revenue	xx